

WHAT IS CLAIMED IS :

1. A health management device, comprising:

an input part for inputting basic data of a user;

a control part for computing an ideal body weight, a body mass index

5 and an waist/hip circumference ratio on the basis of the basic data, suggesting
a prescription by computing an encouraged caloric intake per day, distribution of
respective nutrients and an encouraged caloric consumption per day;

a memory part for storing the input content of the input part, and
software and data required for the processing to be performed by the control
10 part; and

an output part for outputting the basic data and a result of the
processing performed by the control part.

Sub 17
15 2. A health management device of claim 1, wherein the basic data
includes personal data including the distinction of sex and date of birth, body
data, current clinical history and habits, kind and amount of food taken by the
user, and content and hour of activities undertaken by the user.

3. A health management device of claim 1, wherein the control part
suggests a prescription of an amount of one or more food each other and time
of activity on a remaining intake calories and respective nutrients and
20 consumption calories by analyzing the calories and respective nutrients already
taken in and consumed by the user by a predetermined time point in a day
when the user inputs desired food or activity contents.

4. A health management device of claim 2, wherein the body data
includes past body data, current body data, desired body data, height, weight,

waist size, hip size and a routine activity degree as factors for computing encouraged calories per day.

5. In a health management device including an input part for inputting basic data, a control part for suggesting a prescription on the basis of the basic data, a memory part for storing the basic data and software and data required for the process to be performed by the control part, and an output part for outputting a result of the process performed by the control part, a health management method comprising the steps of:

storing the basic data input in the input part by a user;

10 providing functions of the health management device selected by the user;

computing total calories taken in a day;

performing a function for computing total calories consumed by activities in a day on the basis of the basic data;

15 performing a function for outputting a current weight status on the basis of the basic data;

performing a function for assessing a current weight level with relation to a desired weight or an ideal body weight respectively set by the user and assessing how much the current weight reaches the desired weight or the ideal body weight;

estimating a weight of the user after a predetermined time period on the basis of the caloric intake per day and the caloric consumption per day from a predetermined time point in the past to the present; and

estimating a controllable weight from the present to a desired period or a

period to reach a desired weight according to whether the user selects and inputs a desired period or a desired weight.

6. The health management method of claim 5, wherein the step for analyzing total calories consumed in a day comprises the sub-steps of:

5 computing total calories consumed in a day on the basis of input activity contents, activity hours, and the current weight by the control part; and

outputting the computed total calories consumed in a day, remaining encouraged caloric consumption per day and a predictive total caloric consumption in a day by the control part.

10 7. The health management method of claim 5, wherein the step of outputting a current weight status on the basis of the basic data comprises the sub-steps of:

15 computing a body mass index and a waist/hip circumference ratio of the user by analyzing the basic data for outputting whether the current weight of the user is normal or not;

assessing a lower weight, a normal weight, an overweight and obesity with the current body data, the body mass index, and the waist/hip circumference ratio; and

suggesting a prescription.

20 8. The health management method of claim 5, wherein the step of suggesting a prescription for the desired assessment comprises the sub-steps of;

outputting a prescription for a speed of weight control, total caloric intake per day, encouragement or limitation of food intake, and encouraged activity

names via the control part;

determining whether a current status of the user is underweight, normal weight, overweight, or obesity by the control part and suggesting a way for controlling the weight according to the determination by the control part.

5 9. A health management method of claim 5, wherein a future weight simulation step comprises the sub-steps of:

selecting either designation of a desired value or not for estimating a change of weight;

selecting either an estimation period or an estimation weight;

10 determining whether to set a basis for estimating future body data with an estimation period or an estimation weight;

outputting a weight estimation value after a predetermined period on the basis of either changes of caloric intake and consumption per day or a change of the weight from a predetermined time point in the past to the present if the
15 user inputs an estimation period for performing a first simulation step;

outputting a period to reach an estimation weight on the basis of either changes of caloric intake and consumption per day or a change of the weight from a predetermined time point in the past to the present if the user inputs an estimation weight for performing a second simulation step;

20 selecting either a desired period or a desired weight;

determining whether to set a basis for estimating a future body data with an estimation period or an estimation weight;

outputting a controllable weight from the present in a desired period if the user inputs a desired period for performing a third simulation; and

outputting a period to reach an estimation weight in the present state, if the user inputs a desired weight for performing a fourth simulation step.

10. In a health management device including an input part for inputting basic data, a control part for suggesting a prescription on the basis of the basic data, a memory part for storing the basic data and software and data required for the process to be performed by the control part, an output part for outputting a result of the process performed by the control part, a data conversion device and a data transmitting and receiving device using at least wire or wireless cable, a health management system comprising:

10 a network for transmitting data output from the health management device; and

a database server for storing the data transmitted via the network and transmitting a prescription of a doctor suggested on the basis of the stored data to the health management device via the network.

15 11. A health management system of claim 10, wherein the database server has functions for analyzing the basic data, assessing desired body data on the basis of the basic data, and storing the result of the analysis and the assessment to transfer a prescription of a doctor to the health management device.

20 12. In a health management device including an input part, a control part, a memory part, an output part a data conversion device and a data transmitting and receiving device, and having functions to analyze basic data and assess desired body data on the basis of the basic data and desired body data of a user for directly suggesting a prescription, to update the memory content

according to the content of transmission of a database server, to transmit the analysis data, assessment data and the prescription performed by the health management device to the database server according to the requirement of the user, and to output a prescription of a doctor transmitted via the database server, a health management method comprising the steps of:

connecting the database server to the health management device via a network;

storing the analysis data of the basic data, the assessment data of the desired body data, and the prescription data of the health management device transmitted from the health management device; and

transmitting a prescription of a doctor who inspects the analysis data of the basic data, the assessment data of the desired body data, and the prescription data of the health management device by the database server to the health management device, when suggesting the prescription or updating the memory content of the health management device.

13. In the health management device including an input part, a control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device for transmitting basic data and desired body data of a user and outputting a prescription of a doctor who reviews the data, a health management method of claim 12, comprising the steps of:

connecting the database server to the health management device via a network;

storing analysis data of the basic data and the desired body data transmitted from the health management device; and

storing analysis and assessment of the basic data and the desired body data in the database server for transmitting prescription data of a doctor who inspects the stored data to the health management device, when suggesting the prescription or updating the memory content of the health management device

5 14. In a health management device including an input part for inputting basic data, a control part for analyzing the basic data and assessing the desired body data, a memory part for storing the basic data and software and data required for the process to be performed by the control part, an output part for outputting a result of the process performed by the control part, and a data
10 conversion device and a wireless transmitting and receiving device, a health management system comprising:

a base station for connecting to the health management device by using multi-connection communications techniques and protocol to wirelessly connect the health management device to a database server;

15 a base station control part for managing communications frequencies between the health management device and the base station for monitoring and controlling the base station;

the database server for storing information on the installation, management, repair, and connection attestation in the wireless communications
20 connection with the health management device, and transmitting prescription data of a doctor according to the user's basic data to the health management device by being connected to the health management device via the base station; and

a network switch for connecting the base station control part to the

database server.

15. A health management system of claim 14, further comprising the functions of analyzing and assessing the basic data and the desired body data on the basis of the basic data of the user and storing the result of the analysis and the assessment, wherein the prescription of a doctor is transmitted to the health management device.

- Pubad 17 16. In a health management device including an input part, a control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device, and having functions to analyze basic data and assess desired body data on the basis of the basic data and desired body data of a user for directly suggesting a prescription, to update the memory content according to the content of transmission of a database server, to transmit the analysis data, assessment data and the prescription performed by the health management device to the database server according to the requirements of the user, and to output a prescription of a doctor transmitted via the database server, a health management method comprising the steps of:

connecting the database server to the health management device via a network;

- storing analysis data of the basic data, assessment data of the desired body data, and prescription data of the health management device transmitted from the health management device; and

inspecting the analysis data of the basic data, the assessment data of the desired body data, and the prescription data of the health management device in the database server for transmitting prescription data of a doctor or

the memory content of the health management device to the health management device;

transmitting a prescription of a doctor who inspects the analysis data of the basic data, the assessment data of the desired body data, and the prescription data of the health management device to the health management device via the database server, a network switch, a base station control part and a base station, when suggesting the prescription or updating the memory content of the health management device.

17. In the health management device including an input part, a control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device for transmitting basic data and desired body data of a user and outputting a prescription of a doctor who reviews the transmitted data, a health management method of claim 16, comprising the steps of:

wirelessly connecting the base station to the health management device by using multi-connection communications techniques and protocols;

storing the transmitted basic data and the desired body data in the database server; and

performing analysis and assessment of the stored basic data and the desired body data by the database server, storing the analysis and assessment results performed by the database server, and transmitting prescription data of a doctor who inspects the analysis and assessment results of the database server to the health management device via the database server, the network switch, the base station control part and the base station, when suggesting the

prescription or updating the memory content of the health management device.